

ABSTRACT

[0095] The present invention is directed to an electrical system and method for providing power to a truck's cab while the truck's engine is turned off. An already available primary power supply of the truck and a secondary power supply generally located on a trailer being hauled by the truck, are used to charge auxiliary power storage units. The secondary power supply is further used to maintain charge of the auxiliary power storage units while the truck's engine is off. The system may provide power to electrical devices within the truck as DC, or as AC by means of an inverter. The system may further include thermostatic controls to protect the secondary power supply when high-voltage electrical devices such as space heaters are being used. Separate operating circuits are employed that include switching means to enable an operator to, or to automatically, control operation of the system.